UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,010	11/17/2003	Chia-Chang Hu	MR2349-968	1946

4586 7590 06/15/2006

ROSENBERG, KLEIN & LEE
3458 ELLICOTT CENTER DRIVE-SUITE 101
ELLICOTT CITY, MD 21043

EXAMINER	
LAO, LUN YI	

ART UNIT	PAPER NUMBER
2629	

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/713,010	HU ET AL.	
	Examiner	Art Unit	
	LUN-YI LAO	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-19 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-19 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 17 November 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 10/713,011 in view of Paul et al(7,050,606).

This is a provisional obviousness-type double patenting rejection.

The copending application teach a cusor simulator system comprising a receiving module; a position cooresponding module; an image color(wavelength(different color with different wavelength) parameter acquiring module.

The copending application fail to disclose a limb image color parameter acquiring module.

Paul et al teach a limb(hand) image color parameter acquiring module(see figures 1-2, 7; column 1, lines 25-37; column 2, lines 15-32; column 5, lines 8-68; column 6, lines 1-59; column 7, lines 35-68 and column 8, lines 1-58). It would have been obvious to have modified the copending application with the teaching of Paul et al, so as to eliminate the need for data input device, such as mouse or joystick.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-4, 6-7, 9-13, 15-16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwamura(6,501,515) in view of Paul et al(7,050,606).

As to claims 1-4, 6-7, 9-13, 15-16 and 18-19, Iwamura teach a cursor simulator installed in a main system, the main system comprising a display device having a predetermined display frame for displaying a cursor, the main system is connected to an optical reading device having a predetermined view scope, wherein when the optical reading device(13, 15) receives a plurality of optical signals, the optical reading device transmits the optical signals to the main system, and the main system transmits the

optical signals to the cursor simulator, the cursor simulator comprising: a receiving module for receiving the optical signals; a position corresponding module for corresponding the view scope of the optical reading device(13, 15) to the display frame of the display device(9) so that each position in the view scope corresponds to a position on the display frame and a display module for detecting the position on the display frame corresponding to the position of the optical signal in the view scope, and displaying the optical signal on a simulation display frame, wherein the simulation display frame comprises a plurality of optical signal display positions, and each optical signal display position corresponds to a specific position on the display frame; a specific area display module for marking a specific area on the display frame(see figures 1-13; column 1, lines 6-10 and lines 49-68; column 2, lines 1-57; column 4, lines 3-60; column 5, lines 11-68; column 6, lines 1-60 and column 7, lines 1-35).

Iwamura fails to disclose a limb image color parameter acquiring module.

Paul et al teach a limb image color parameter acquiring module for reading the color parameter of each optical signal display position in an area on the simulation display frame corresponding to the specific area of the display frame so as to obtain a limb image color parameter according to the variation of the color parameter of the optical signal display position; and a limb image forming module for reading the color parameter of each optical signal display position on the simulation display frame, wherein when the color parameter is approximately equal to the limb image color parameter, the limb image forming module records the optical signal display position, and then form a simulated limb image according to all of the recorded optical signal

display positions(see figures 1-2, 7; column 1, lines 25-37; column 2, lines 15-32; column 5, lines 8-68; column 6, lines 1-59; column 7, lines 35-68 and column 8, lines 1-58).). It would have been obvious to have modified Iwamura with the teaching of Paul et al, so as to distinguish the gesture input signal from other visually "noisy" moves and to be more effective and safe from the input gesture(see column 2, lines 11-12).

As to claim 2, Paul et al teach the limb image is a hand image(see figure 3 and column 2, lines 16-19).

As to claims 3 and 12, Paul et al teach a floating parameter acquiring module for acquiring a floating parameter according to the different color parameters of the optical signals displayed on the simulation display frame at different times, wherein the color parameter is approximately equal to the wavelength parameter(different color with different wavelength) when a difference between the color parameter and the wavelength parameter is less than or equal to the floating parameter(threshold)(see figures 1-5; column 5, lines 3-68 and column 6, lines 1-59).

As to claims 4 and 13, Paul et al teach a comparing module for comparing the positions of the simulated limb image formed by the limb image forming module at the different times so as to generate a position comparing result(see figures 1-5 and column 6, lines 28-59).

As to claims 6 and 15, Iwamura teaches the movement mode, the cursor simulator determine s the relative movement of the simulated limb image(hand) according to the position comparing result generated by the comparing module, and

moves the cursor displayed on the display frame according to the relative movement(see figures 3, 16; and column 4, lines 16-40).

As to claims 7 and 16, Iwamura teach a limb posture(hand) determining module for determining the posture of the simulated limb image(hand) formed by the limb image forming module, wherein when the cursor simulator is in the command mode, the limb posture determining module generates a command code(button push or select) according to the limb image(see figures 1-3 and column 4, lines 16-45).

5. Claims 5, 8, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwamura(6,501,515) in view of Paul et al(7,050,606) and Doi et al(6,266,061).

As to claims 5, 8, 14 and 17, Iwamura as modified fail to switching the cursor simulator to be in a command mode and a movement mode or a command table.

As to claims 5, 8, 16-17, Doi et al teach a cursor simulator system comprising: a switching module for switching the cursor simulator to be in a command mode(a select mode or a double clik mode) and a movement mode(cursor move mode)(see figures 1-3, 20-22; abstract; column 1, lines 47-51; column 2, lines 8-49; column 7, lines 23-36; column 13, lines 20-36-68; column 14, lines 1-11). It would have been obvious to have modified Iwamura as modified with the teaching of Doi et al, so the input accuracy and the user operability could be expected to be improved by a recognition engine(see column 13, lines 29-31).

As to claims 8 and 17, Doi et al teach a command table comprising a plurality of commands(select or double click) and a plurality of command codes, each of the

commands being corresponding to a command code, wherein the commanding module finds the command corresponding to the command code generated by the limb posture determining module so that the cursor simulator sends out the command(see figures 3, 21-22; column 45-68 and column 14, lines 1-11)

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Freeman et al(5,594,469) teach a display system having hand gesture detection in which the hand gesture causes movement of an icon on a display.

Sigel(5,168,531) teach a display system for controlling a cursor by determining the location of a user's finger.

Hsieh(6,043,805) teach a controlling method for for controlling a cursor by determining the location of a user's finger.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi Lao whose telephone number is 571-272-7671. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 11, 2006

L. Y. Lao

Lun-yi Lao
Primary Examiner